

## Reporting of Accidental Releases

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## U.S. Chemical Safety and Hazard Investigation Board

CSB Guidance on 40 C.F.R. Part 1604

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# 1 Part 1604—Reporting of Accidental Releases

## 1.1 Preliminary Notice

The statements in this document are intended solely as guidance to help owners and operators of stationary sources and other stakeholders understand and comply with the CSB's Accidental Release Reporting Rule, 40 C.F.R. Part 1604. The guidance is not a substitute for reading the rule itself and taking the time to understand the requirements of the rule as it applies to your facility, and any accompanying responsibilities that might arise to make a required report under the rule, following an accidental release.

This guidance does not constitute rulemaking by the CSB and may not be relied on to create a substantive or procedural right or benefit enforceable, at law or in equity, by any person. The CSB may decide to update this guidance without advance public notice to reflect changes in the CSB's approach to implementing the rule or clarifying/updating the text of this publication, as may be required in the agency's sole discretion in the performance of its mission. However, the CSB will strive to give ample notice pending any changes in policy guidance. Such future agency guidance will be released on the CSB website, found at [www.csb.gov](http://www.csb.gov) at the Legal/FOIA tab located at the bottom of the page. In addition, to determine whether the CSB has revised this document or to obtain a copy of the latest version of the Accidental Release Reporting Rule, contact the CSB's Office of Investigations and Recommendations by email at [report@csb.gov](mailto:report@csb.gov).

**The contents of this document reflect the CSB's Accidental Release Reporting Rule as published on February 5, 2020, on the CSB agency website and subsequently published as a final rule on February 21, 2020, in the Federal Register.**



## 1.2 Legislative Authority

Congress amended the Clean Air Act (CAA) in 1990 (hereafter the 1990 CAA Amendments) with the passage of Public Law Number 101-549.<sup>1</sup> Within those amendments to the CAA, the Congress included a provision that created the CSB. The CSB's enabling statute, found in Title [42 U.S.C. § 7412\(r\)\(6\)](#), outlined the Board's intended mission in subsection (C):

(C) The Board shall-

(i) ***investigate (or cause to be investigated), determine and report to the public in writing the facts, conditions, and circumstances and the cause or probable cause of any accidental release resulting in a fatality, serious injury or substantial property damages;***

(ii) ***issue periodic reports*** to the Congress, Federal, State and local agencies, including the Environmental Protection Agency and the Occupational Safety and Health Administration, ***concerned with the safety of chemical production, processing, handling and storage,*** and other interested persons ***recommending measures to reduce the likelihood or the consequences of accidental releases and proposing corrective steps to make chemical production, processing, handling and storage as safe and free from risk of injury as is possible*** and may include in such reports proposed rules or orders which should be issued by the Administrator under the authority of this section or the Secretary of Labor under the Occupational Safety and Health Act [29 U.S.C. 651 et seq.] to prevent or minimize the consequences of any release of substances that may cause death, injury or other serious adverse effects on human health or substantial property damage as the result of an accidental release; and

(iii) ***establish by regulation requirements binding on persons for reporting accidental releases into the ambient air subject to the Board's investigatory jurisdiction.***

Reporting releases to the National Response Center, in lieu of the Board directly, shall satisfy such regulations. The National Response Center shall promptly notify the Board of any releases which are within the Board's jurisdiction. (All emphasis added.)

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<sup>1</sup> P.L. No. 101-549, 101<sup>st</sup> Congress, Second Session, was titled: "An Act to amend the Clean Air Act to provide for attainment and maintenance of health protective national ambient air quality standards, and for other purposes."

### 1.3 Legislative History

In addition to the plain text of the CSB's enabling statute cited above, which outlined the CSB's duty to investigate accidental releases and issue periodic reports and recommendations aimed at reducing the risk of accidental releases and reducing the impact of such releases should they occur, Congress also directed the CSB to promulgate an accidental release reporting rule. See 42 U.S.C. § 7412(r)(6)(C)(iii). The CSB's [legislative history](#) helps clarify the vision Congress had in mind for the CSB's future investigation and recommendations mission, which was to be supported by an accidental release reporting rule:

Chemical Safety Board— Subsection (e) of the new section 129 establishes an independent safety board, to be known as the Chemical Safety and Hazard Investigation Board, which is to investigate accidents resulting from the production, processing, handling or storage of chemical substances causing death, serious injury, or substantial property damage (including damage to natural resources). (All emphasis added.)

The legislative history accompanying the creation of the CSB's enabling statute outlines five broad duties intended by Congress for the board. The first of those duties was “to investigate serious accidents which result from the production, processing, handling or storage of chemical substances and report in writing on the cause or probable cause of each accident.” (All emphasis added.) The third specified duty was “to establish requirements for reporting accidents including measures to preserve evidence which may substantiate the cause or probable cause of the accident.”

These mission-based duties intended by Congress are consistent with the CSB's legislative origins within the 1990 CAA Amendments. In the highest sense, the CSB's mission is related to clean air and the protection of the natural environment of the United States, protection which would then necessarily flow to workers in facilities involved with hazardous chemical substances and the protection of those who live near such facilities throughout the nation. Many documents related to the CSB's legislative history reflect deep Congressional concern about air pollutants in general, and in particular, toxic air pollutants that threaten the quality of air and the environment, and which adversely affect human health and life.

As a natural outgrowth of that overarching set of environmental concerns, however, Congress made clear that it was also concerned with the investigation of *accidental releases* of hazardous chemicals that result in releases to the ambient air from stationary sources that also could have significant negative outcomes for the citizens of the United States (specifically including reference to fatalities, serious injuries, or substantial property damage, including damage to the natural environment). Consistent with the thrust of the CAA, which is intended to protect the nation's air and natural environment, the CSB served as an extension of that legislation, envisioned as a protector of workers and members of the public who work or live near stationary source facilities. In this way, the Congress created the CSB as an agency equipped to focus on accidental releases.



As documented throughout the CSB's legislative history, it is not coincidental that the origins of the CSB in the 1990 CAA Amendments not only tracked the natural progression of the strengthening of the CAA in terms of improving the nation's air quality, but also followed closely in time to major chemical disasters around the world, and in the United States. Most notable was the tragic chemical release of methyl isocyanate from the Union Carbide plant in Bhopal, India, in 1984 that killed thousands of people. A similar event at another Union Carbide facility in West Virginia in August 1985 sent over 400 area residents to the hospital, also due to the release of methyl isocyanate, and further raised public concern and drove congressional action. Additionally, during the final drafting and negotiations of the 1990 CAA Amendments, a devastating series of explosions and an ensuing fire at the Phillips Petroleum Company's Houston Chemical Complex occurred on October 23, 1989. The Phillips incident fatally injured 23 employees and injured 314 – only two months before the finalization of the 1990 CAA Amendments and the creation of the CSB. Thus, the CSB's overall statutory mission must be seen historically as arising in relation to the environmental mandates of the CAA for the improvement of the nation's air quality, the overall protection of the environment, and the desired improvement of the health of American citizens related to decreased pollution, in addition to the articulated focus on major accident investigation and prevention.



## 1.4 Summary of the CSB's Accidental Release Reporting Rule

As required by [42 U.S.C. 7412\(r\)\(6\)\(C\)\(iii\)](#), the CSB issued a final rule on February 5, 2020, to require an owner or operator of a stationary source to submit an accidental release report to the CSB. The rule describes when an owner or operator is required to file a report of an accidental release and the required contents of such a report. The purpose of the rule is to ensure that the CSB receives rapid, accurate reports of any accidental release that meets established statutory criteria.

As envisioned in the rule, the accidental release reports require information that is either already known or should readily be available to an owner or operator soon after an accidental release. Such information must be reported within eight hours. The information required by the CSB in its rule is needed by the CSB to make informed decisions about its jurisdiction, interagency coordination with local, state, and federal authorities, and all facets of deployment decision-making. For example, paragraphs (a) through (e) in Section 1604.4 (Information required in an accidental release report) require contact information and a basic description of the accidental release. Paragraph (g) requests the relevant Chemical Abstract Service (CAS) Registry Number associated with the chemical(s) involved in the accidental release. Paragraphs (h), (i), (j), and (l)(1)–(3) require basic information “if known.” This recognizes that some of this requested information may not be known within eight hours of an accidental release, but still also allows for updates to be made to original reports filed under this rule without penalty. (See discussion under Section 1604.3, Reporting an accidental release).



## 2 Guidance:

The CSB promulgated its Accidental Release Reporting Rule to help the CSB decide when to initiate an investigation into an accidental release, including whether to deploy a team of investigators to the site to do “all things necessary and proper” to initiate an investigation and obtain critical information about the incident. Upon arriving at the site of an accidental release, CSB investigators, on behalf of the Board, are responsible for notifying the owner/operator to secure the site of the accidental release and to preserve all relevant evidence in order to allow the agency to commence an investigation. Thereafter, the CSB investigates an accidental release to determine and report to the public in writing the facts, conditions, and circumstances, as well as the cause or probable cause of any accidental release resulting in a fatality, serious injury, or substantial property damage. If appropriate, the CSB will also issue needed safety recommendations. However, the CSB’s success in terms of its core mission begins with learning about accidental releases in a timely manner, so the agency’s investigative processes may commence, critical evidence can be secured, and witness testimony remains fresh.

For this reason, in light of the publication of the CSB’s Accidental Release Reporting Rule, the CSB offers the following guiding principles to owners and operators of stationary sources (fixed facilities) as well as all other interested stakeholders with respect to the reporting rule. This guidance should be especially helpful to owners and operators who may experience an accidental release involving the production, processing, handling, or storage of chemicals at a stationary source that they own or operate, and where such an accidental release results in a fatality, serious injury, or substantial property damage. This guidance is intended to help owners/operators interpret the CSB’s Accidental Release Reporting Rule from the agency’s perspective. However, nothing contained within this guidance itself is binding, and the text of the CSB’s enabling statute and all relevant agency regulations, including the CSB’s Accidental Release Reporting Rule itself, control in the event of any inconsistency. Similarly, nothing contained in this guidance should be considered legal advice. Owners/operators are required to make their own independent assessment of all relevant facts and circumstances, in light of the requirements of the CSB’s Accidental Release Reporting Rule, for themselves. Then, using their best efforts, in good faith, owners/operators must determine whether an accidental release should be reported and act accordingly, in compliance with federal law. When unsure, an owner/operator should report.

To start, the CSB offers the following general guidance:

- The CSB considers owners/operators to be best positioned to understand what is happening at their facilities during exigent circumstances following an accidental release, to know and to take all legally required and otherwise appropriate actions in response to an accidental release, and to remain reasonably informed of all relevant facts and circumstances surrounding the accidental release and emergency response activities. Owners/operators are inherently most familiar with their facilities, policies and procedures, chemical processes and stockpiles, the location and duties of workers and other plant personnel, the functioning of emergency response, the ability to





conduct search and rescue operations, the need to engage in firefighting or needed environmental mitigation measures, and all other legal responsibilities.

- Based on discussions with the National Response Center (NRC) staff, the CSB has determined that during the eight-hour window for reporting an accidental release to the CSB (and any other shorter deadline for reporting pursuant to other federal or state laws), owners/operators who experience an accidental release should be capable of making a complete report to the CSB in less than ten minutes. Reporting time to the CSB should be even faster if the accidental release was already reported to the NRC due to some other reporting requirement in federal law (e.g., CERCLA, which requires immediate reporting to the NRC), at which point all the owner/operator must do is provide the CSB with the NRC report number within 30 minutes of reporting the event to the NRC.
- The CSB expects that owners/operators who experience an accidental release will act to the best of their ability to provide the CSB with the required information within the required eight-hour timeframe. Complete information is the goal, but absolute perfection is not a requirement. Hence, the rule allows for “safe harbor” reporting within 30 days following the incident so that owners/operators can update their submissions with more accurate information once it is determined that a mistake or omission was made during the initial accidental release reporting. This “safe harbor” also applies to newly developed information or information that was not otherwise available by the time the owner/operator made its report to the CSB.
- Under the CSB’s Accidental Release Reporting Rule, it is always safer for an owner/operator to report, rather than fail to report. Thus, it is the CSB’s position that if an owner/operator is unsure whether the incident should be reported, the owner/operator should report, rather than risk violating the rule by failing to report. There is no sanction or enforcement action associated with reporting an accidental release, which in retrospect, did not have to be reported. The opposite, however, is not true. Failure to report an accidental release when required by this rule could lead to an enforcement action brought by the EPA.
- It bears noting that just because an accidental release must be *reported* under this rule, it does not necessarily mean the CSB will *deploy* a team to investigate the accidental release. The CSB makes deployment decisions based on a variety of factors.
- Key to the analysis of any accidental release is the reality that the CSB only has jurisdiction to investigate accidental releases of hazardous substances into the ambient air from a stationary source that result in a fatality, serious injury, or substantial property damage. Typically, such accidental releases will result from the **production, processing, handling, or storage of chemical substances**. Without these key circumstances present, the CSB lacks jurisdiction to investigate.

In the following pages, the CSB presents additional high-level guidance in a Question-and-Answer style to help owners/operators determine whether an accidental release must be reported under the Accidental Release Reporting Rule.



## 2.1 General Q & A

### 2.1.1 I am having trouble determining if something is considered “an extremely hazardous substance” under this rule. What guidance can you provide?

The definition of “extremely hazardous substance” arises as a part of the definition of an “accidental release” under the CSB’s Accidental Release Reporting Rule, which states: “Accidental release is defined as an unanticipated emission of a *regulated substance or other extremely hazardous substance* into the ambient air from a stationary source. This definition is adopted verbatim from 42 U.S.C. 7412(r)(2)(A).” (Emphasis added.)

For purposes of the CSB’s rule, the term “regulated substances” speaks for itself. This phrase covers substances that are regulated by the Federal government, including but not limited to the Environmental Protection Agency’s Risk Management Plan Rule (List of Regulated Substances) in Section 112(r) of the CAA, or the Occupational Safety and Health Administration’s Process Safety Management Standard (List of Highly Hazardous Chemicals, Toxics or Reactives, Appendix A of 29 C.F.R. § 1910.119), both of which are relevant to the CSB’s investigative work, and referenced in the CAA. Importantly, however, whether a regulated substance involved in an accidental release meets the threshold quantity requirement that triggers coverage by these other regulatory provisions is irrelevant for purposes of the CSB’s investigative jurisdiction. As such, it is also irrelevant to the question of whether an accident involving one of these regulated substances must be reported in accordance with the CSB’s rule. As explained in the preamble to the CSB’s rule itself:

Limiting the CSB definition to threshold limits set by other laws would potentially lead to results inconsistent with the CSB’s statutory purpose. For example, the accidental release of a “regulated substance” that does not meet a threshold quantity can still cause serious injuries and death. There is nothing in the statutory scheme to suggest that a death or serious injury caused by less than a threshold quantity of a “regulated substance” or other hazardous substance falls outside the CSB’s investigatory jurisdiction.

Congress included the term “other extremely hazardous substance” in the CSB’s enabling statute. Underscoring its broad definition and the inapplicability of a threshold quantity limit, the definition of “extremely hazardous substance” used by the CSB includes the phrase “including but not limited to any ‘regulated substance’ at or below any threshold quantity set by the EPA Administrator under 42 U.S.C. 7412(r)(5).” EPA’s list of regulated substances is a regulation that applies only to owners or operators of stationary sources which fall within that agency’s regulatory coverage (see 40 C.F.R. § 68.10) and does not limit the jurisdiction of an independent Federal agency, such as the CSB. The EPA lists threshold amounts to determine when a facility owner must develop a Risk Management Plan. 40 C.F.R. §§ 68.150– 68.185. For the purpose of the CSB’s Accidental Release Reporting Rule, however, whether a substance is, by definition, a “regulated substance” does not turn on the



presence of a threshold amount of that substance. This approach is consistent with the legislative history of the CSB. The phrase “other extremely hazardous substance” was not defined by Congress when it created the CSB, so the agency has had to rely on the legislative purpose of the agency as stated in its enabling statute, along with relevant legislative history, which follows an outcome-oriented approach to determine whether a substance is considered “extremely hazardous” for the CSB’s purposes.

For example: “The release of any substance which causes death or serious injury because of its acute toxic effect or as the result of explosion or fire or which causes substantial property damage by blast, fire, corrosion or other reaction would create a presumption that such substance is extremely hazardous.” Sen. Rep. 101–228 at 139 (1989), reprinted in 1990 U.S.C.C.A.N. 3385, 3596. And even then, the specific property of a substance that would typically and logically be assessed for determining whether something is hazardous (such as flammability, toxicity, corrosivity, etc.) does not always determine whether a substance is extremely hazardous. A substance on its own may not be considered hazardous, but when combined with other substances or in certain environments or under certain circumstances, the result may be hazardous or perhaps even lethal (e.g., nitrogen asphyxiation). Thus, for purposes of the CSB’s reporting rule, the term “extremely hazardous substance” is defined as “any substance which may cause death, serious injury, or substantial property damage, including but not limited to any “regulated substance” at or below any threshold quantity set by the EPA Administrator under 42 U.S.C. 7412(r)(5).” (Emphasis added.) This definition even includes new chemicals or compounds that are created over time. The CSB has and will continue to investigate matters involving the accidental releases of chemicals, petrochemicals, and hydrocarbons of all types, provided that a fatality, serious injury, or substantial property damage is caused by the accidental release at issue.

- 2.1.2 I understand that “substantial property damages” of over \$1,000,000 (even without a fatality or serious injury) makes an accidental release reportable under the CSB’s rule. Is that limited to just the replacement costs of the equipment damaged in the accidental release itself, or are there other costs we should include in relation to the \$1,000,000 figure?**

As a general matter, if an accidental release causes property damage, the total amount should be easy to estimate – at least in terms of whether the total damages are less than or greater than \$1,000,000. The full range of costs should be included in the calculation. Clearly, a prompt estimate related to the cost of any equipment damaged that needs to be repaired or replaced must be factored into any calculation for damage. In addition, in the chemical and petrochemical industries, most equipment is not just swapped out, but engineering work must often be done as part of a broader management of change effort, as required by OSHA’s PSM Standard and EPA’s RMP Rule, which is also frequently accompanied by specialized contractor costs associated with transportation and installation, employee overtime, and the like. There may be other such costs as well, unique to any given situation. Additionally, loss of use must be included for consideration. Most CSB stakeholders know exactly how many pounds, gallons, or barrels of product

typically flow through a process unit and should be able to quickly and easily estimate the cost associated with a unit going down based on either the number of hours or days that the unit must be down due to damage caused by the accidental release. CSB stakeholders should be well acquainted with all this information – since such calculations often are needed for routine internal business reporting, or even filing a business interruption insurance claim. In accordance with the CSB’s legislative history, damages to “natural resources” should also be factored into this figure.

**2.1.3 Our company is not a typical CSB stakeholder. We are not in the chemical, petrochemical, or oil and gas business. However, as a part of our business operations, we do purchase, store, and use chemicals, such as diesel for generators or lead-acid batteries that provide backup power for critical network infrastructure. Does this rule apply to us?**

The answer to this question depends on the specific facts. In consideration of the CSB’s creation within the 1990 CAA Amendments, the text of the CSB’s enabling statute, and pertinent legislative history, the CSB would observe that the agency was created to investigate, report on, and hopefully prevent chemical accidents. Clearly, the CSB was not intended to address all industrial accidents or fires. If, for example, a lead-acid battery exploded at a financial institution data center, the CSB will view that incident differently from a lead-acid battery explosion for an uninterruptable power supply to a chemical plant’s computer control system that leads to an accidental release resulting in a fatality, serious injury, or substantial property damage.

Another example of a general industry incident would include a paper-product warehouse that experiences a fire because of an electrical wiring problem, or the malfunctioning of a diesel generator which causes an accidental release of combustion products into the ambient air, both of which could result in substantial property damage. In such events, the CSB would not deploy investigators because the incident was not associated with the production, processing, handling, or storage of chemical substances. As a result, the CSB would not expect the warehouse owner to file an accidental release report.

As noted above, however, no sanction or enforcement action results from reporting an accidental release if there was no legal requirement to report it. On the other hand, the failure to report an accidental release when it actually is required to be reported can result in an enforcement action against the owner/operator by the EPA.

**2.1.4 I understand an accidental release must be reported within eight hours. But what if we operate a facility that is remote and potentially not even occupied at the time of the accidental release, and we do not even know about the release until after the eight-hour deadline?**

Owners/operators cannot be expected to report accidental releases if they do not know they occurred. As with other aspects of the CSB’s intended implementation of this rule, the CSB expects owners/operators to use their good faith best efforts to comply. If the incident is not known until after the initial eight-hour reporting window, the CSB expects the owner



or operator to act in good faith and promptly report the accidental release upon discovery with an explanation about why the report has been filed late.

- 2.1.5 What happens if we determine an accidental release is not reportable because at the eight-hour mark after the release, we conclusively find no fatality, serious injury, or substantial property damage; however, after the eight-hour window has closed, it turns out facts have changed, and the accidental release did cause one (or more) of those three things. For example, an employee ended up having to go to the hospital and was admitted for a serious injury that the employee had not reported to us earlier because the employee went home. In another example, what about a situation where the property damage ends up being more serious than we could identify within the initial eight hours, but maybe 16 hours after the accidental release, we come to realize the property damage is in excess of \$1,000,000. What do we do then?**

If the owner/operator truly has no knowledge of either a fatality, serious injury, or substantial property damages that arose from the accidental release during the initial eight-hour period, there is no obligation to report within the eight-hour window. However, as under both of the presented scenarios, if the owner/operator learns of a change of circumstance that made the accidental release reportable (injury became serious injury, property damage estimates evolved from minor to substantial), the owner/operator must report immediately upon learning of the new circumstance.

- 2.1.6 What happens if an employee or contractor gets injured during a planned activity, such as permitted flaring? Because the activity was planned and, therefore, intentional, does that make it not an “accidental release” and not reportable under the rule?**

The activities planned and undertaken at stationary sources are sometimes inherently dangerous. Sometimes, even planned events go wrong, and an accident can occur. If the accident involves an accidental release of an extremely hazardous substance, and one of the three established triggers for CSB jurisdiction occurs (fatality, serious injury, or substantial property damage), then the accidental release must be reported. In this example, the flaring was planned (intentional), but the release in no way could have been intended to injure a worker or cause other negative consequences (accidental). In this way, the planned and permitted release via flaring still resulted in an accidental release, and based on the consequences, this accidental release must be reported.

- 2.1.7 Does the CSB’s Accidental Release Reporting Rule apply to transportation-related facilities, such as pipelines, pipeline facilities, and liquefied natural gas facilities?**

Yes. Oil and gas pipelines and pipeline facilities, underground natural gas storage facilities, and liquefied natural gas facilities meet the definition of a stationary source in the CSB’s Accidental Release Reporting Rule. As such, the owner or operator of a stationary source must report any accidental release resulting in a fatality, serious injury, or substantial property damage. Although the CSB and National Transportation Safety Board (“NTSB”) have a memorandum of understanding (MOU) that, among other things, designates the NTSB as the lead agency for the investigation of releases that are transportation-related,



this interagency agreement does not impact the Accidental Release Reporting Rule. The CSB can investigate, and has investigated, transportation-related accidental releases such as those implicated in this question, whether jointly with the NTSB or on its own if the NTSB declines to investigate, per the CSB's enabling statute and the existing MOU between the agencies. In addition, the CSB has the authority to investigate accidental releases that result in a serious injury, while the NTSB's authority to investigate a pipeline accident does not include a serious injury. As such, the ability of the CSB to investigate a transportation-related incident that involves a serious injury actually plays an important role in closing an identified regulatory gap. (The NTSB has the authority to investigate a pipeline accident in which there is a fatality, substantial property damage, or significant injury to the environment.) PHMSA/DOT may also investigate accidental releases from facilities within that agency's enforcement jurisdiction. Not unlike OSHA's or EPA's ability to investigate accidental releases in parallel to the CSB, the NTSB and PHMSA/DOT could also investigate transportation-related issues simultaneously to the CSB, except in the case of the latter example, by virtue of the existing MOU, where the NTSB has jurisdiction, the NTSB could choose to exclude the CSB when taking the lead on a given transportation-related incident.



## 2.2 Q & A

### 2.2.1 Are substances, such as water or air, considered extremely hazardous substances—for example, high-temperature steam?

An accidental release of water or air could meet the criteria of an extremely hazardous substance. The Accidental Release Reporting Rule states that the owner or operator of a stationary source must report any accidental release resulting in a fatality, serious injury, or substantial property damage. The rule's definition of "extremely hazardous substance" includes any substance that alone, or in combination with other substances or factors, causes death, serious injury, or substantial property damages. The manner in which a substance inflicts such consequences may vary broadly (fire, explosion, effects of toxicity, asphyxiation, etc.) but what defines the substance as "extremely hazardous" is its demonstrated impact on people and the environment upon being accidentally released from a stationary source into the ambient air, as those terms are defined.

### 2.2.2 A steam leak occurs on a steam generator at the boiler house, and the generator must be taken offline for repair. The leak causes damages of approximately \$10,000 to some essential equipment but does not result in any injuries or fatalities. The steam generator shutdown results in the refinery implementing a steam shedding plan, including rate reductions at several ancillary process units. The rate reductions result in more than \$1,000,000 of lost production. Is this event reportable under the Accidental Release Reporting Rule?

In this hypothetical scenario, additional detail would be helpful to make a more complete and certain determination, but it appears that the release of steam caused damage to equipment that was essential to sustain operation and thus resulted in substantial property damage. The determination of substantial property damage includes the value of lost production. Because the accidental release resulted in substantial property damage, this event may be reportable under the Accidental Release Reporting Rule. In answering this question, we made the assumption that the release may be closely associated with the production, processing, handling, or storage of chemicals at stationary sources (fixed facilities) of the type that were contemplated by the CAA. In contrast, for example, the CSB does not expect the owner or operator of a boiler system used in a car wash operation or a boiler system used for residential heating of an apartment complex to report such a release, as such releases are not within the CSB's investigative jurisdiction, for the reasons noted above.

### 2.2.3 A steam leak occurs on a steam generator at the boiler house and damages electronic control equipment necessary to operate a nearby process unit resulting in more than \$1,000,000 of lost production. The leak causes damage of approximately \$10,000 to the electronic control equipment but does not result in any injuries or fatalities. Is this event reportable under the Accidental Release Reporting Rule?

In this hypothetical scenario, additional detail would be helpful to make a more complete and certain determination, but it appears the accidental release of steam caused damage to



equipment that was critical to sustain operation and thus resulted in substantial property damage. The determination of substantial property damage includes the value of lost production. Because the accidental release resulted in substantial property damage, this event may be reportable under the Accidental Release Reporting Rule. In answering this question, we made the assumption that the release may be considered to be closely associated with the production, processing, handling, or storage of chemicals at stationary sources (fixed facilities) of the type that were contemplated by the CAA. In contrast, for example, the CSB does not expect the owner or operator of a boiler system used in a car wash operation or a boiler system used for residential heating of an apartment complex to report such a release, as such releases are not intended within the CSB's investigative jurisdiction, for the reasons noted above.

- 2.2.4 A leak of liquid hydrocarbon from a pump seal results in a fire with no fatalities or injuries but causes property damage of \$100,000 to piping and electrical wiring. The repair costs for the pump seal are \$25,000. The pump is fully spared and the repairs to the pump seal and fire damage can be done with the unit online. However, for added safety in making the repair, the associated unit is shut down, resulting in a loss of associated revenue. Based on the duration of maintenance activities, market prices, and demand for products, the business interruption exceeds \$1,000,000. Is this event reportable under the Accidental Release Reporting Rule?**

This hypothetical calls for assuming that the shutdown is the result of the owner or operator's decision to seek "added safety" in making the repair rather than being the result of the owner or operator's obligations under existing regulations, such as responsibilities arising under the general duty clause, mechanical integrity, or other fitness for service requirements. If the shutdown is *entirely* the result of the owner or operator's decision to seek "added safety," the release is not reportable. If, however, the shutdown is in any way the result of the owner or operator's obligations under existing regulations, the accidental release resulted in substantial property damage. Because the owner or operator of a stationary source must report any accidental release resulting in a fatality, serious injury, or substantial property damage, this event is reportable under the Accidental Release Reporting Rule.

- 2.2.5 Does the Accidental Release Reporting Rule apply to liquids, or is it limited to vapor releases?**

Nothing in the Accidental Release Reporting Rule limits an extremely hazardous substance to a gas or vapor. Limiting reporting to just vapor releases would undercut a primary purpose of section 112 of the 1990 CAA Amendments — to protect workers inside structures at a stationary source. Many chemicals or petrochemicals in use throughout industry are in a liquid or a solid state; so, whether they are in a liquid, solid, or gas state, extremely hazardous substances can be released into the ambient air, as defined by the rule. Even accidental releases of solids, such as combustible dust, can result in a fatality, serious injury, or substantial property damage.





**2.2.6 Is the reporting requirement calculated at 8 hours from an event (accidental release) or from being cognizant of tripping one of the reporting triggers (fatality, serious injury, or substantial property damage)?**

The owner or operator of a stationary source must report any accidental release resulting in a fatality, serious injury, or substantial property damage. If the owner or operator has not submitted a report to the NRC (for example, due to a release mandatory for reporting under CERCLA or some other federal environmental statute) and was instead required to notify only the CSB under Section 1604.3(b), the owner or operator must submit a report directly to the CSB within eight hours of the accidental release. If initial reports or estimates of the outcome of an accidental release show that the accidental release was not reportable, but the owner or operator later obtains information within the 30-day “safe harbor” period following the release that shows that the accidental release resulted in a fatality, serious injury, or substantial property damage, the owner or operator must submit a report to the CSB immediately. For example, consider a worker exposed to a substance who goes home at the end of the workday rather than going to a hospital for evaluation or treatment. That night, the worker’s symptoms escalate, prompting inpatient overnight admission and treatment at a hospital. The facts underlying the original evaluation of the accidental release have changed, and the new information makes the event reportable under the Accidental Release Reporting Rule. Under the rule, if a report was made but important facts change, the owner or operator can update the reported information within 30 days without enforcement consequences, and failure to do so could result in an enforcement action. There is no requirement, however, to update accidental release reports with information that only becomes available after the conclusion of the 30-day “safe harbor” period. The CSB will use its discretion to decide whether to conduct follow-up information-gathering activities after the 30-day window has passed, and owners or operators must continue to comply with any request for information from the CSB (if any) whenever such a request occurs.

**2.2.7 Electrical failure at a substation causes a facility to shut down. The facility flares during the shutdown, releasing a regulated substance into the air. The repairs caused by the electrical failure cost more than \$1,000,000. The release of the regulated substance into the air does not cause any independent impact (no fatality, serious injury, or substantial property damage). Is this event reportable under the Accidental Release Reporting Rule?**

No. The Accidental Release Reporting Rule states that the owner or operator of a stationary source must report any accidental release resulting in a fatality, serious injury, or substantial property damage. In this hypothetical scenario, it appears the flare functioned as designed. However, the flared material did not result in (or stated differently, did not cause) a fatality, serious injury, or substantial property damage. As a result, the event does not require reporting under the CSB’s rule. Of course, the flaring may be reportable or trigger other regulatory responsibilities (or liabilities) imposed by other federal and state agencies.



**2.2.8 An electrical failure results in a release of a regulated substance, which causes an inhalation injury to an employee resulting in inpatient hospitalization. Is this event reportable under the Accidental Release Reporting Rule?**

Yes. The Accidental Release Reporting Rule states that the owner or operator of a stationary source must report any accidental release resulting in a fatality, serious injury, or substantial property damage. In the hypothetical scenario provided, the electrical failure resulted in an accidental release, and the accidental release resulted in a serious injury. Because the outcome of the accidental release included a serious injury, this event is reportable under the Accidental Release Reporting Rule. Note: Although this hypothetical scenario was based on the release of a regulated substance, even an unregulated substance would be considered an “extremely hazardous substance” in this scenario due to the outcome of the accidental release, and as a result, the event would still be reportable under the Accidental Release Reporting Rule.

**2.2.9 There is a fire in a storage area in a building used for light industrial purposes (a paper product warehouse) not caused by an accidental release (for example, caused by an electrical short). Products of combustion are released due to the fire, but there was no accidental release that triggered the event. There were no injuries or fatalities, but there was substantial property damage from the fire. Is this event reportable under the Accidental Release Reporting Rule?**

The CSB is only authorized to investigate matters within its statutory investigative jurisdiction. The CSB does not intend to investigate all industrial fires and explosions and will investigate only industrial fires and explosions that meet the CSB’s established jurisdiction. The Accidental Release Reporting Rule requires reporting of accidental releases that are within the CSB’s investigative jurisdiction to give the CSB a “flash report” of relevant information needed to make a fast and efficient determination on whether to deploy an investigative team as part of an agency investigation and enable the CSB to obtain other critical information relating to the incident. Thus, for purposes of this question, the CSB would not refer an owner or operator for enforcement for failing to report a fire of ordinary household or office combustibles (paper, wood, cloth, or plastic). If an owner or operator is unsure whether such an event is reportable, the owner or operator should report, as there is no sanction or enforcement for over-reporting.

**2.2.10 There is a fire in a storage area in a light industrial setting (a paper product warehouse) not caused by accidental release (for example, caused by an electrical short). Products of combustion are released due to the fire, but there was no accidental release that triggered the event. An emergency responder suffers a serious smoke inhalation injury from the fire. Is this event reportable under the Accidental Release Reporting Rule?**

Similar to the answer contained in Question 2.2.9, the CSB does not intend to investigate and will not refer an owner or operator for enforcement for not reporting a fire of ordinary household or office combustibles (paper, wood, cloth, or plastic). Such accidental releases typically will fall outside the CSB’s investigative jurisdiction. As noted above, however, if an

owner or operator is unsure whether such an event is reportable, the owner or operator should report, as there is no sanction or enforcement for over-reporting.

**2.2.11 An explosion is contained wholly within a piece of equipment (for example, an explosion inside a boiler or other equipment). There is no release into the ambient air. Damage to the internals of the equipment results in more than \$1,000,000. Is this event reportable under the Accidental Release Reporting Rule?**

As specifically presented, this event is not reportable, as there is no accidental release. However, the hypothetical scenario includes a boiler, which will commonly have a combustion air system using ambient air. These systems are typically not sufficiently robust to fully contain an explosion without the products of an explosion releasing (at least to some extent) back into the ambient air. This is especially true where the facts of the hypothetical indicate in excess of \$1,000,000 worth of property damages. For a typical boiler, such an explosion would likely create an accidental release. If the accidental release resulted in substantial property damage (as presented in the hypothetical scenario), this event would be reportable under the Accidental Release Reporting Rule. If an owner or operator is unsure whether such an event involving a boiler or other such equipment is reportable, the owner or operator should report, as there is no sanction or enforcement for over-reporting.

**2.2.12 If the same explosion above, internal to the equipment, ruptures the equipment, causing a release to air of NO<sub>x</sub> (oxides of nitrogen) and carbon monoxide, but no injuries or damage resulted from the accidental release. Is this event reportable under the Accidental Release Reporting Rule?**

As specifically presented, this event is not reportable under the Accidental Release Reporting Rule. However, the hypothetical scenario states that the accidental release to the ambient air of oxides of nitrogen and carbon monoxide did not contribute to the substantial property damage, which is unlikely to be true in the real world. In this hypothetical scenario, the products of the explosion meet the definition of an accidental release, and if the accidental release results in a fatality, serious injury, or substantial property damage, this event would be reportable. In addition, oxides of nitrogen and carbon monoxide are “regulated substances” under the CAA, which provides another basis for reporting under the CSB’s Accidental Release Reporting Rule, so long as the accidental release caused a fatality, serious injury, or substantial property damage.

**2.2.13 An explosion internal to the equipment (at a stationary source) ruptures the equipment and causes a serious injury to an employee in the vicinity due to the pressure wave or shrapnel from the explosion. Is this event reportable under the Accidental Release Reporting Rule?**

Yes. In this hypothetical scenario, the products of the explosion meet the definition of an accidental release. Because the accidental release resulted in a serious injury to an employee due to the flying shrapnel caused by the explosion, this event would be reportable under the Accidental Release Reporting Rule.



**2.2.14 If a liquid is spilled or drains to the ground and is then contacted by a worker (for example, stepped in), which results in an injury (such as thermal or chemical burns) requiring hospitalization, would the event be reportable to the CSB?**

In this hypothetical scenario, additional detail surrounding the circumstances is needed. However, if the liquid on the ground is the result of an accidental release to the ambient air as it spilled or drained to the ground from process equipment, piping, or something similar, or because it changed state from vapor to liquid which accumulated in a puddle which the worker stepped into, this event would be reportable under the Accidental Release Reporting Rule because the accidental release resulted in a serious injury.

**2.2.15 If a liquid was released from equipment under pressure, resulting in a spray or mist and the spray or mist contacted a worker resulting in an injury or illness requiring hospitalization, would the event be reportable to the CSB?**

Yes. The liquid spray (or mist) is likely the result of an accidental release into the ambient air. Because the accidental release resulted in a serious injury, this event would be reportable under the Accidental Release Reporting Rule.

**2.2.16 A release of high-temperature steam or steam condensate causes burns to an individual, which results in inpatient hospitalization. Is this event reportable under the Accidental Release Reporting Rule?**

Yes. The condensate (hot liquid water) is the result of an accidental release, and because the accidental release resulted in a serious injury, this event would be reportable under the Accidental Release Reporting Rule. In answering this question, we made the assumption that the release was closely associated with the production, processing, handling, or storage of chemicals at a stationary source (fixed facility). For example, the CSB does not expect the owner or operator of a boiler system associated with a car wash or a boiler system used for residential heating of an apartment complex to report such a release, as such releases were not intended to be within the CSB's investigative jurisdiction, for reasons noted above.

**2.2.17 High-pressure air is being used to clean equipment. The cleaning wand malfunctions, and an individual sustains a serious cut from the high-pressure air on their arm or leg, requiring inpatient hospitalization. Is this event reportable under the Accidental Release Reporting Rule?**

No. Using high-pressure fluids (such as liquid water), steam, or air with a wand to clean equipment lacks a sufficiently close association with the production, processing, handling, or storage of chemicals at stationary sources (fixed facilities). As such, this event would not be reportable under the Accidental Release Reporting Rule.

**2.2.18 Please clarify whether a leak on a raw water supply line that forces a facility to shut down and results in more than \$1,000,000 of business interruption would be reportable to the CSB.**

In this hypothetical scenario, the accidental release of raw water from piping did not result in substantial property damage. Rather, the hypothetical scenario is based on the accidental



release being the result of a leak in a raw water supply line for some unstated reason (for example, perhaps from damage caused by an earthquake). More facts about the nature of the leak would be helpful. Because the accidental release was caused by the earthquake and no damages were caused by the release of raw water, this event would not be reportable under the Accidental Release Reporting Rule. For this event to be reportable, a fatality, serious injury, or substantial property damage would have to be caused by the release of the raw water at a facility associated with the production, processing, handling, or storage of chemicals. If, for example, the raw water release flooded and damaged a critical computer control system forcing the facility to cease operations, and the resulting shutdown was projected to exceed more than \$1,000,000 in property damage, then the event would be reportable under the Accidental Release Reporting Rule.

**2.2.19 Please clarify whether a leak on a wastewater line within permit limits (i.e., NRC RQ reporting exemption) that forces a facility to shut down and results in more than \$1,000,000 of business interruption would be reportable to the CSB.**

In this hypothetical scenario, the accidental release of wastewater from piping does not result in substantial property damage. Rather, the hypothetical scenario is based on the accidental release being the result of a piping integrity issue of some unknown origin (for example, a manufacturing defect). More facts about the nature of the leak would be helpful. Because the accidental release did not result in substantial property damage, however, based on the facts presented, this event likely would not be reportable under the Accidental Release Reporting Rule. Threshold quantities in other regulations, such as permit limits, have no role in determining what an extremely hazardous substance is for purposes of the CSB's Accidental Release Reporting Rule. For this event to be reportable, the accidental release of wastewater would need to result in a fatality, serious injury, or substantial property damage at a facility associated with the production, processing, handling, or storage of chemicals. If, for example, the wastewater release would have flooded and damaged a critical computer control system that forced the facility to cease operations, and the resulting shutdown was projected to exceed more than \$1,000,000 in property damage, then the event would be reportable under the Accidental Release Reporting Rule.

**2.2.20 Please clarify whether combustible dust is an extremely hazardous substance. Note: not all combustible dust has a CAS number (e.g., wood dust).**

Under the Accidental Release Reporting Rule, an extremely hazardous substance is any substance that may cause death, serious injury, or substantial property damage, including but not limited to any "regulated substance" at or below any threshold quantity set by the Environmental Protection Agency (EPA) Administrator under [42 U.S.C. 7412\(r\)\(5\)](#), following its release into the ambient air. As previous CSB investigations of combustible dust incidents have shown, combustible dust has the potential to produce an accidental release resulting in a fatality, serious injury, or substantial property damage. Whether a substance has a CAS number does not affect the evaluation of an extremely hazardous

substance. Additionally, whenever reporting an incident, and there is no CAS number, an appropriate response is “Not Applicable.”

- 2.2.21 An accidental release and resultant small fire damages a pump critical to a manufacturing process. Replacement costs for the materials and installation are less than \$100,000. However, it takes five days to receive and install the new pump. The unit production is valued at \$250,000 per day. As such, potential business interruption would be \$1,250,000 during the five days that the unit remained down waiting on the installation of the new pump. Is this event reportable under the Accidental Release Reporting Rule?**

Likely yes. In this hypothetical, more facts would be helpful in assessing the incident, but because the question is posed as an accidental release, certain assumptions can be made. In this case, it appears likely that an accidental release resulted in substantial property damage, as the determination of substantial property damage includes the value of lost production in addition to the cost of the replacement pump, along with all in-house and contractor required work to get the new pump installed, including engineering work, permits, and the like. Part of the damage caused includes the inherent value of the pump while installed and functional prior to the accidental release, which facilitates the creation of revenue. Because the owner or operator of a stationary source must report any accidental release resulting in a fatality, serious injury, or substantial property damage, this event is reportable under the Accidental Release Reporting Rule.

- 2.2.22 An accidental release occurs, but there is no apparent equipment damage from the release. The release is not an immediate danger to workers or the public, but the unit is shut down in an abundance of caution in order to inspect internal equipment. Business interruption is estimated to be \$1,500,000. Is this event reportable under the Accidental Release Reporting Rule?**

The hypothetical scenario calls for assuming that the shutdown is the result of an owner or operator voluntarily shutting down out of an “abundance of caution” rather than the owner or operator making a decision based on existing regulations, such as a general duty clause, mechanical integrity, or fitness for service requirements, similar to the answer provided in question 2.2.4. If the shutdown was not done purely voluntarily out of an “abundance of caution,” the accidental release resulted in substantial property damage and would be reportable.

- 2.2.23 An explosion occurs internal to a dryer system designed to contain such an explosion. All property damage is internal to the dryer. The damage to the dryer system exceeds \$1,000,000. Is this event reportable under the Accidental Release Reporting Rule?**

No. The hypothetical scenario is an event with no accidental release to ambient air. Because the owner or operator of a stationary source must report any accidental release resulting in a fatality, serious injury, or substantial property damage, this event is not reportable under the Accidental Release Reporting Rule. If the facts surrounding this event were different; however, such that the hot combustion gases were released toward a worker who then suffered a serious injury, the event would be reportable.

- 2.2.24 A malfunction occurs due to equipment failure that results in flaring. The only release to ambient air is through the flare. The release (flaring) does not result in a fatality, serious injury, or substantial property damage. But the unit is shut down out of an abundance of caution to make repairs and to stop the flaring event. Business interruption is estimated to be \$1,500,000. Is this event reportable under the Accidental Release Reporting Rule?**

The hypothetical scenario calls for assuming that the unit shutdown is the result of the owner or operator's "abundance of caution" rather than being the more typical result of the owner or operator having obligations under existing regulations, such as a general duty clause, mechanical integrity, or fitness for service requirements, as noted above in two similar questions. In this hypothetical scenario, there is no accidental release, and this event is not reportable under the Accidental Release Reporting Rule. The hypothetical assumes the equipment failure was in no way the result of an accidental release itself. However, if the shutdown was not done purely voluntarily out of an "abundance of caution" but instead because of some regulatory requirement (such as a general duty clause, mechanical integrity, or fitness for service requirements), the accidental release resulted in substantial property damage and would be reportable.

- 2.2.25 A stationary source has an accidental release that caused an estimated \$50,000 in equipment damage, but at the time of the release, it is determined that business interruption will be well under \$1,000,000, as the repairs should be able to be made quickly. The next business day (more than 8 hours from the release), it is determined that the repairs will require additional time to complete and, as a result, business interruption will be greater than \$1,000,000. Would the source be required to report the release upon learning business interruption will likely exceed \$1,000,000, even though this is after the 8-hour deadline?**

If early estimates of the outcome of an accidental release were arrived at in good faith and show that the accidental release was not reportable, then the owner or operator would be correct in not initially reporting the event. This analysis becomes complicated in that updated estimates regarding the outcome of the accidental release escalate from initial estimates such that the accidental release can now be stated to have resulted in a fatality, serious injury, or substantial property damage. If initial reports or estimates of the outcome of an accidental release show that the accidental release was not reportable, but the owner or operator later obtains information within the 30-day "safe harbor" period following the release that shows that the accidental release resulted in a fatality, serious injury, or substantial property damage, the owner or operator must submit a report to the CSB immediately. In this case, the original decision not to report was correct, but in light of new information regarding the outcome of the accidental release, the owner or operator must immediately submit a report to the CSB.

**2.2.26 Alternatively, what if the total cost of the damage is determined to be just over \$1,000,000 after all repairs are completed, ten days later, due to unanticipated expediting charges? Is the facility required to “revisit” the initial estimates and report late if the final costs are higher than originally estimated?**

There is no “requirement” for an owner or operator to “revisit” initial repair estimates, but if, within the 30-day “safe harbor” period following the release, the final costs are determined to be higher than originally estimated, the owner or operator must report the event immediately. Similar to the analysis contained in 2.2.25, if initial estimates of the outcome of an accidental release show that the accidental release was not reportable, but later estimates of the outcome change, such that the accidental release resulted in a fatality, serious injury, or substantial property damage, the owner or operator must immediately submit a report to the CSB.

**2.2.27 A stationary source has a release that causes an injury to a worker. The worker is taken to an emergency room, treated, and released. The next day, the worker’s condition worsened, and they returned to the emergency room and were then admitted to the hospital. Would the source be required to report the release upon learning of an injury with hospitalization, even though this is after the 8-hour deadline?**

Yes. Similar to the analysis contained in other responses, if initial estimates of the outcome of an accidental release show that the accidental release was not reportable, but later estimates of the outcome change, such that the accidental release resulted in a fatality, serious injury, or substantial property damage, the owner or operator must promptly submit a report to the CSB.

**2.2.28 Is our interpretation that the CSB’s Accidental Release Reporting Rule does not apply to transportation-related facilities, such as pipelines, pipeline facilities, and liquefied natural gas facilities, correct?**

No, that interpretation is not correct. Oil and gas pipelines and pipeline facilities, underground natural gas storage facilities, and liquefied natural gas facilities meet the definition of a stationary source in the CSB’s Accidental Release Reporting Rule. As such, the owner or operator of a stationary source must report any accidental release resulting in a fatality, serious injury, or substantial property damage. Although the CSB and NTSB have a memorandum of understanding that, among other things, designates the NTSB as the lead agency for the investigation of releases that are transportation-related, this interagency agreement does not impact the Accidental Release Reporting Rule. To be clear, the CSB can investigate transportation-related accidental releases such as those implicated in this question, whether jointly with the NTSB or on its own if the NTSB declines to investigate, per the CSB’s enabling statute and the existing MOU between the agencies. In addition, the CSB has the authority to investigate accidental releases that result in a serious injury, while the NTSB’s authority to investigate a pipeline accident does not include a serious injury, so the ability of the CSB to investigate a transportation-related incident that involves a serious injury actually plays an important role in closing an identified regulatory gap. The NTSB



has the authority to investigate a pipeline accident in which there is a fatality, substantial property damage, or significant injury to the environment. PHMSA/DOT may also investigate such accidents as a matter within that agency's enforcement jurisdiction. Not unlike OSHA's or EPA's ability to investigate accidental releases in parallel to the CSB, the NTSB and PHMSA/DOT could also investigate transportation-related issues simultaneously to the CSB, except in the case of the latter example, by virtue of the existing MOU, where the NTSB has jurisdiction, the NTSB could choose to exclude the CSB when taking the lead on a given transportation-related incident.

**2.2.29 Does the CSB intend its Accidental Release Reporting Rule to apply to (1) natural gas releases from (2) natural gas transportation facilities such as interstate and intrastate natural gas transmission pipelines, natural gas distribution systems, and natural gas storage facilities incident to transportation?**

Yes. These facilities meet the definition of a stationary source. As such, the owner or operator of a stationary source must report any accidental release resulting in a fatality, serious injury, or substantial property damage. Although the CSB and NTSB have a memorandum of understanding that, among other things, designates the NTSB as the lead agency for the investigation of releases that are transportation-related, this interagency agreement does not impact the Accidental Release Reporting Rule. Again, the CSB can investigate transportation-related accidental releases such as those implicated in this question, whether jointly with the NTSB or on its own, if the NTSB declines to investigate, per the CSB's enabling statute and the existing MOU between the agencies, as noted above in 2.2.28. PHMSA/DOT may also investigate such accidents as a matter within that agency's enforcement jurisdiction. In any event, the CSB is still free within its rule to require the reporting of any accidental release, per the requirements of the Accidental Release Reporting Rule.

**2.2.30 Does the Accidental Release Reporting Rule apply to data centers, where the chemicals are diesel fuel (for electrical power generation equipment) and lead-acid batteries?**

The question originates from a data center associated with a financial institution, such as a bank. If the data center lacks a close association with the production, processing, handling, or storage of chemicals at stationary sources (fixed facilities), the CSB does not expect an owner or operator to report an accidental release involving equipment and substances used for backup power supply, as such an incident would be outside the CSB's jurisdiction. As discussed in other responses, however, it is the CSB's position that if an owner/operator is unsure whether an incident should be reported, the owner/operator should report, rather than risk violating the rule by failing to report. There is no sanction or enforcement action associated with reporting an accidental release, which in retrospect, did not have to be reported. The opposite, however, is not true. Failure to report an accidental release when required by this rule could lead to an enforcement action by the EPA.

**2.2.31 Why do companies have to provide the CSB with the NRC identification number within 30 minutes? It seems redundant and unnecessary.**

This issue was addressed in the preamble to the [Accidental Release Reporting Rule](#), which stated:

The submission of a report to the NRC under other laws does not satisfy the CSB's reporting requirement. The CSB does not interpret section C(iii) to mean that any report filed with NRC automatically satisfies any reporting obligation to the CSB. As explained above, the information provided to NRC under other laws may not include all accidental releases within the CSB's particularized jurisdiction. Moreover, when the CSB receives information from the NRC, the NRC reports do not indicate whether or not the report was submitted pursuant to a specific law. Without this information, the CSB cannot quickly determine why the particular release was reported to the NRC and, the CSB has no way of determining whether a report relates to an accidental release within the CSB's jurisdiction. In addition, not all reporting laws require the same information or have the same deadline for reporting as the CSB rule. Thus, the CSB cannot simply rely on NRC reports to learn of accidental releases within its jurisdiction.

Because of the way the NRC system is structured, a notification to the NRC does not always provide sufficient information for the CSB to determine its jurisdiction. Specifically, the NRC only reports whether workers were sent to the hospital, and these reports do not typically clarify whether the injured person was admitted as an inpatient. The company notification to the CSB within 30 minutes removes this ambiguity because the company is acknowledging that one of the three bases of CSB investigative jurisdiction has been met (e.g., an inpatient hospitalization).

**2.2.32 Can you clarify the scope and applicability of the Accidental Release Reporting Rule to oil and gas pipelines and pipeline facilities, underground natural gas storage facilities, and liquefied natural gas facilities regulated by the Pipeline and Hazardous Materials Safety Administration ("PHMSA") and subject to the investigative authority of the National Transportation Safety Board ("NTSB")?**

Oil and gas pipelines and pipeline facilities, underground natural gas storage facilities, and liquefied natural gas facilities meet the definition of a stationary source. As such, under the Accidental Release Reporting Rule, the owner or operator of a stationary source must report any accidental release resulting in a fatality, serious injury, or substantial property damage. In some areas, the CSB and NTSB have overlapping jurisdiction and investigative authority. To help address this, [42 U.S.C. 7412\(r\)\(6\)\(E\)](#) required the CSB to enter into a memorandum of understanding with the NTSB to, among other things, designate the NTSB



as the lead agency for the investigation of releases that are transportation-related. This coordination between the CSB and NTSB has no impact on the Accidental Release Reporting Rule. Although the CSB and NTSB have a memorandum of understanding that, among other things, designates the NTSB as the lead agency for the investigation of releases that are transportation-related, this interagency agreement does not impact the Accidental Release Reporting Rule. Again, the CSB can investigate, and has investigated, transportation-related accidental releases such as those implicated in this question, whether jointly with the NTSB or on its own, if the NTSB declines to investigate, per the CSB's enabling statute and the existing MOU between the agencies, as noted above in 2.2.28. PHMSA/DOT may also investigate such accidents as a matter within that agency's enforcement jurisdiction. Parallel investigations are common within the federal government. Unless restricted by the NTSB for some reason, the investigation of transportation-related incidents is no exception, and the CSB, the NTSB, and PHMSA could all potentially be involved in a transportation-related accidental release investigation, or the CSB could conduct an investigation involving transportation completely on its own, depending on the circumstances presented.

**2.2.33 Are pipelines and pipeline facilities (for example, compressor stations, regulator stations, or other pipeline facilities), underground natural gas storage facilities, or liquefied natural gas facilities that are regulated by the Pipeline and Hazardous Materials Safety Administration ("PHMSA") within the Department of Transportation subject to the Accidental Release Reporting Rule?**

Yes. These facilities meet the definition of a stationary source. As such, under the Accidental Release Reporting Rule, the owner or operator of a stationary source must report any accidental release resulting in a fatality, serious injury, or substantial property damage. Although the CSB and NTSB have a memorandum of understanding that, among other things, designates the NTSB as the lead agency for the investigation of releases that are transportation-related, this interagency agreement does not impact the Accidental Release Reporting Rule. PHMSA/DOT may also investigate such accidents simultaneous to the CSB as matters within that agency's enforcement jurisdiction.

**2.2.34 A fire due to hot ashes inadvertently introduced into a container occurs in a landfill, transfer station, or recycling facility and results in the accidental release of a substance; the accidental release does not result in a fatality, serious injury, or substantial property damage, but the fire itself causes over \$1,000,000 in property damage. Would this incident be reportable under the Accidental Release Reporting Rule?**

The details of each event are important to fully understand any incident being assessed for reporting under the CSB's rule. In this case, if the landfill lacks a close association with the production, processing, handling, or storage of chemicals at stationary sources (fixed facilities), the CSB does not expect an owner or operator to report such an accidental release as it would be outside the CSB's jurisdiction.

**2.2.35 A fire occurs in a landfill. The fumes from the fire result in the hospitalization of two employees. Is this a reportable event (a release that causes serious injuries to two employees)? If so, would the description of the incident as required in the reporting requirements be a fire or serious injury?**

The details of each event are important to fully understand any incident being assessed for reporting under the CSB's rule. In this case, if the landfill operation lacks a close association with the production, processing, handling, or storage of chemicals at stationary sources (fixed facilities), the event would not be reportable, even if it seriously injured two employees. If, however, the hypothetical scenario suggests the accidental release was associated with chemical production, processing, handling, or storage, then the release would be reportable under the rule.

**2.2.36 Stabilization is the mixing of hazardous wastes with reagents such as portland cement, fly ash, etc., to reduce the leachability of metal/inorganic contaminants in wastes and meet RCRA Land Disposal Restrictions (LDR) treatment standards before disposal of the treated wastes in a landfill. A chemical reaction at a stabilization unit causes the release of fumes that overwhelm two employees, resulting in the hospitalization of one employee for observation and treatment. Is this hypothetical scenario reportable under the Accidental Release Reporting Rule?**

The details of each event are important to fully understand any incident being assessed for reporting under the CSB's rule. If the landfill operation has a close association with the production, processing, handling, or storage of chemicals at stationary sources (fixed facilities), the owner or operator must report an accidental release from a chemical reaction that seriously injures an employee. In this case, the presence of hazardous wastes and the use of reagents intended to promote a chemical reaction at a stabilization unit clearly suggest this to be a reportable accidental release. Based on these facts, the stabilization process represents a situation involving chemical production, processing, handling, or storage. Additionally, because an employee required inpatient hospitalization, this which meets the definition of a serious injury in the CSB's Accidental Release Reporting Rule; however, without a fatality, serious injury, or substantial property damage, a report is not required under the rule.

**2.2.37 An embedded contract employee for Company A suffers a serious injury as a result of an accidental release at a plant belonging to Company B. Under the Accidental Release Reporting Rule, does the reporting obligation belong to Company A or Company B?**

The rule requires the owner or operator of a stationary source to report any accidental release resulting in a fatality, serious injury, or substantial property damage. The owner or operator means any person or entity who owns, leases, operates, controls, or supervises a stationary source. This definition includes parties with a joint interest, partnership interest, partial ownership interest, co-ownership interest, or any otherwise co-responsible parties who, in some manner, share in the ownership, leasing, operation, control, or supervision of a stationary source. However, the owner(s) and operator(s) may decide among themselves how best to meet the requirements of the rule, as long as an accidental release report is submitted by at least one of the parties following an accidental release. In the CSB's

judgment, the “owner or operator” of the fixed facility that experienced the accidental release in this scenario should make the report under the rule, though admittedly, that could be two different companies. Whether the company that provides contract labor could actually be a third company or is appropriately deemed an “operator” of the site must be determined by the parties. Thus, Company A, Company B – or all companies involved at a given facility – can report. As discussed in other responses, it is the CSB’s position that if an owner/operator is unsure whether to submit a report, the owner/operator should report, rather than risk violating the rule by failing to report. There is no sanction or enforcement action associated with reporting an accidental release, which in retrospect, did not have to be reported. The opposite, however, is not true. Failure to report an accidental release when required by this rule could lead to an enforcement action by the EPA. The CSB’s bottom line is that someone properly considered to be an “owner or operator” must report the accident release as required, with all required information, and within established timeframes.

**2.2.38 BACKGROUND: Refuse decomposition in landfills results in the generation of landfill gas that contains methane or hydrogen sulfide. Landfills have engineered gas collection systems that are designed to capture this gas generated by the waste decomposition process. SCENARIO: A release of landfill gas to ambient air from a landfill waste mass during construction activities or a landfill gas collection and control system results in a serious injury requiring inpatient hospitalization. Is this a reportable incident under the Accidental Release Reporting Rule?**

The details of each event are important to fully understand any incident being assessed for reporting under the CSB’s rule. If the landfill operation has a close association with the production, processing, handling, or storage of chemicals at stationary sources (fixed facilities), the owner or operator must report an accidental release associated with chemical production or processing that seriously injures an employee. In this case, based on the information provided, the owner/operator experienced the accidental release of an extremely hazardous substance that caused serious injury. Because the gas collection system involves chemical production, processing, handling, or storage, the owner/operator must report the accidental release in accordance with the CSB’s Accidental Release Reporting Rule.



# U.S. Chemical Safety and Hazard Investigation Board

